IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	:	
Randy D. Jester	:	Examiner: M. Miggins
U.S. Serial No. 10/720,028	:	Group Art Unit: 1772
Filed November 21, 2003	:	
Docket No. 1725 (TI-02-03)	:	
For: CYCLOOLEFIN COPOLYMER HEAT SEALABLE FILMS AND PACKAGING INCORPORATING SAME	:	

Assistant Commissioner for Patents
Washington, D.C. 20231

DECLARATION UNDER 37 CFR 1.132

Randy D. Jester, inventor of the subject matter of the above-noted patent application hereby declares:

1. That he was awarded BS and MS degrees in Chemical Engineering from North Carolina State University and has worked in the field of polymer technology for 27 years, and that he is the sole inventor of the subjected matter of United States Patent Application Serial No. 10/720,028 entitled "*Cycloolefin Copolymer Heat Sealable Films and Packaging Incorporating Same*" referenced above, and makes this *Declaration* in support of patentability.

2. That he understands from Counsel that the pending claims have been rejected over United States Patent No. 5,532,030 to *Hirose et al.*, among other references, and that he is familiar with the '030 *Hirose et al.* patent.

3. That he makes this *Declaration* on personal knowledge of the facts stated herein.

4. That claim 1 of the pending application is representative of the claimed subject matter:

> Claim 1. A heat-sealable film suitable for heat sealing at low temperatures comprising at least one layer consisting essentially of a cycloolefin copolymer (COC), wherein the COC has a Tg of from about 30 to about 55°C.

5. That the *Hirose et al.* reference discloses a polyolefin multilayer laminate containing a cycloolefin-based resin that has a softening temperature in preferred ranges of from 50°C to 180°C, as is seen in column 3:

> The cycloolefin-based resin (A1) to be employed according to the present invention has a softening temperature (TMA) of usually −40° C. or higher, preferably 0°–180° C., more preferably 50°–180° C., as determined on a Thermal Mechanical Analyzer. The softening temperature (TMA) is

6. That the softening temperature referred to in column 3 of the *Hirose et al.* reference is not the equivalent of the glass transition temperature of the resin. The softening temperature and the glass transition temperature are two separate characteristics of a resin which are measured by two entirely different procedures. For example, as stated in *Hirose et al* at column 3, lines 47-55, the softening temperature is the temperature at which a needle penetrates a sheet of the plastic to a depth of 0.635

mm, under a 49 gram load. The softening temperature is measured on a Thermal Mechanical Analyzer (TMA). By contrast, the glass transition temperature is the temperature of the endotherm in a differential scanning calorimetry analysis of the resin.

7. That the glass transition temperature and the softening temperature of a resin are generally not used interchangeably in the field of polymer science, and that the Tg and softening temperature values of a given resin are typically not the same.

8. That it is known to the Declarant that cycloolefin copolymers generally have glass transition temperatures which are approximately 7-10°C higher than their softening points. That cycloolefin copolymers with softening temperatures in the range of from 50°C to 180°C would not have Tg's of from 30 to 55°C. That, in his technical opinion, the *Hirose et al.* reference does not suggest to use COC resins with Tg's in the range of 30°C to 55°C.

9. The undersigned Declarant declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the subject application or any patent issuing thereon.

Dated 11/21/05

Randy D. Jester